

Serial No. 10/550,964
Art Unit 2609

PU030103
Customer No. 24498

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Listing of Claims

1. (Currently Amended) A communications system, comprising:
a gateway connected to a wired network; and
a plurality of access points associated with, and controlled by, the gateway,
wherein each access point is configured (i) to wirelessly communicate with and receive
association requests from wireless clients for connection to the wired network through the
access point (ii) to send session information requests to the gateway in response to received
association requests and (iii) to process session information setting commands received from
the gateway,

wherein the gateway is configured (i) to maintain session information that currently
exists for each wireless client connected to the wired network through an access point
associated with the gateway, the session information including a session key associated with
each wireless client and an associated access point, and (ii) to respond to a session information
request from a given access point by providing that access point with currently existing
session information, if any, maintained by the gateway for the wireless client requesting
association with that access point.

A system for enabling roaming of wireless clients among wireless access points
comprising:

a gateway in a wired network which comprises access points, the gateway having
means to (a) receive session data requests from access points, the session data including a
session key associated with each wireless client and an associated access point, (b) look up
session data, and (c) send session data back to the requesting access points,

the access points having means to send requests for session data to from the gateway
and means to receive session information setting commands from the gateway.

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2. (Currently Amended) The system of claim 1 wherein each access point is configured
~~has means~~ to maintain a session key per associated wireless client.

3. (Currently Amended) The system of claim 1 wherein each access ~~the gateway~~ point
is configured ~~has means~~ to remove session information after a wireless client becomes
disassociated with ~~an~~ that access point ~~comprising by either responding to sending a command~~
~~sent to the access point from the gateway to remove the session information and/or to remove~~
~~or automatically removing~~ idle wireless client session information entries ~~entires~~ after a
predetermined period of inactivity.

4. (Original) The system of claim 1 having means to ensure that a connection between
the gateway and an access point is trusted.

5. (Original) The system of claim 4 wherein the means comprises physical security or
encryption.

6. (Original) A method of enabling roaming of wireless clients among wireless access
points in a network comprising the steps of (a) providing a gateway in the network, sending
session data requests from access points to the gateway, the session data including a session
key associated with each wireless client and an associated access point, (b) looking up session
data stored in the gateway, reporting session data failure if session data is not found, and (c)
sending a session data response from the gateway to the access point if session data is found or
is generated by the gateway.

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7. (Original) The method of claim 6 wherein an association request from a wireless station is received by an access point and, after receiving a session data response from the gateway, the access point loads session data and sends the session data to the wireless client.

8. (Original) The method of claim 6 wherein an association request from a wireless client is received by an access point and, after receiving a session data failure response from the gateway, the access point generates session data, reports the generated session data to the gateway and sends an association response to the wireless client.

9. (Currently Amended) The method of claim 6 comprising removing session information from the previously associated access point after a wireless client becomes associated with a new access point comprising the gateway sending a command to the previously previously associated access point to remove the session information or automatically removing idle wireless client entries after a predetermined period of inactivity.

10. (Original) The method of claim 6 wherein the gateway authenticates an access point to ensure that a connection between the gateway and the access point is trusted.

11. (Original) The method of claim 10 wherein the authentication is encrypted.

12. (Currently Amended) A computer readable medium encoded with containing instructions that are executable, when executed by a processor of in a gateway that is connected to in a wired network which comprises access points controlled by the gateway, for the gateway to perform performs the steps of:

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- (a) receiving session data requests sent from access points to the gateway, the session data including a session key associated with each wireless client and an associated access point,
- (b) looking up session data stored in the gateway, and reporting session data failure if session data is not found, and
- (c) sending a session data response from the gateway to the access point if session data is found or is generated by the gateway.

13. (Currently Amended) A computer readable medium encoded with ~~comprising~~ instructions that are executable, ~~when executed by a processor in a wireless access point in a network~~ for the wireless access point device to perform, ~~performs~~ the steps of:

~~receiving an association request from a wireless client; and, after receiving a session data response from a gateway, loads session data and sends the session data to the wireless station, the session data including a session key associated with each wireless client and an associated access point~~

communicating with a gateway connected to the network to obtain currently existing session information maintained by the gateway, if any, which is associated with the wireless client requesting association to the wireless access point, the session information comprising a session key associated with the wireless client and an associated wireless access point;

receiving a session data response from the gateway, which includes currently existing session information for the wireless client requesting association to the wireless access point;
and

loading the session information into the wireless access point and sending the session information to the wireless client in an association response transmitted to the wireless client.

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14. (Currently Amended) The computer readable medium of claim 13, further encoded with instructions executable by the processor for the wireless access point to perform steps of: wherein after receiving a session data failure response from the gateway indicating that no session information currently exists for the wireless client, and in response to said received data failure response, performs the steps of generating session data, reporting the generated session data to the gateway and nad sending an association response to the wireless client station.

15. (Currently Amended) The computer readable medium of claim 13, further encoded with instructions executable by the processor for the wireless access point to perform a step which performs the steps of removing session information for a wireless client from a previously associated with the wireless access point after a the wireless client becomes associated with a new wireless access point, sending a command to the previously associated access point to remove the session information or automatically removing idle wireless client entries after a predetermined period of inactivity.

16. (Currently Amended) The computer readable medium of claim 13, further encoded with instructions that are executable by the processor of the wireless access point device to perform an authentication process which performs the steps of authenticating an access point to ensure that a connection between the gateway and the wireless access point is trusted.

17. (Currently Amended) The computer readable medium of claim 16 wherein the authentication comprises is encrypted communications with the gateway.